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(71) Applicant: **Sumitomo (S.H.I.) Construction Machinery Co., Ltd.**
Shinagawa-ku
Tokyo 141-6025 (JP)

(72) Inventor: **Tsukamoto, Hiroyuki**
Chiba, 263-0001 (JP)

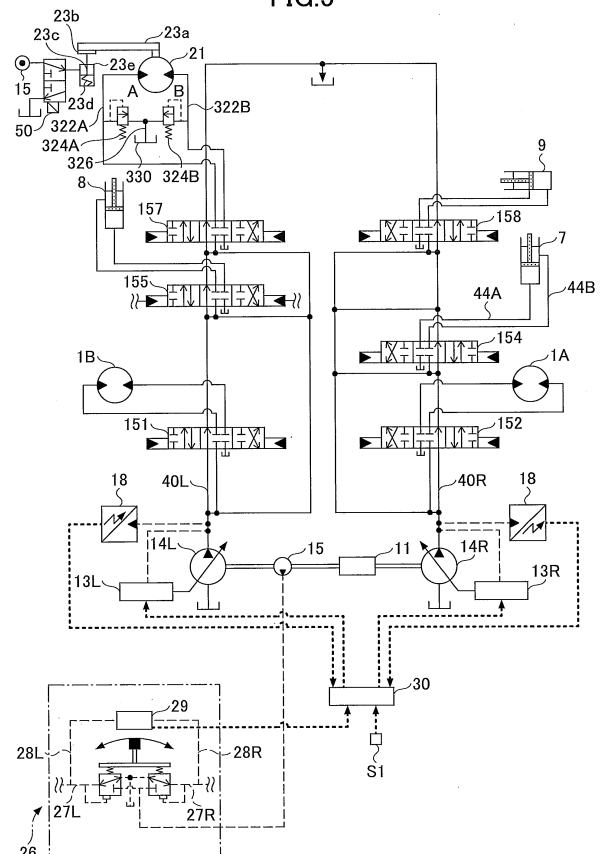
(74) Representative: **Klang, Alexander H.**
Wagner & Geyer
Gewürzmühlstrasse 5
80538 München (DE)

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(54) **SHOVEL AND CONTROL METHOD THEREOF**

(57) A shovel includes a lower running body and an upper turning body that is turnably provided on the lower running body. An engine is mounted on the upper turning body. A hydraulic pump is driven by the engine to discharge an operating oil. A hydraulic actuator is mounted on the upper turning body. A control device controls operations of the shovel. An entering object detection device detects a position of an entering object in a monitoring area of said shovel and outputs a detection signal indicating the detection position of said entering object. The control device supplies, after a determination of an entry of the entering object into the monitoring area, the operating oil from the hydraulic pump to the hydraulic actuator.

FIG.5





EUROPEAN SEARCH REPORT

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Y	* paragraphs [0026], [0053], [0024]; figures 2,3,9,10 *	6	

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Y	US 5 490 081 A (KUROMOTO KAZUNORI [JP] ET AL) 6 February 1996 (1996-02-06)	6	TECHNICAL FIELDS SEARCHED (IPC) F16P E02F
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 18 January 2016	Examiner Pedersen, Henrik
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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EPO FORM 1503 03.82 (P04C01)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☒ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

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☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-4, 7

Detecting and reacting on entering objects

2. claims: 5, 8

Control overruled operator input

3. claim: 6

Determining distance of object

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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